



# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Westington, D.C. 20231

SERIAL NUMBER   FILING	DATE	FIRST NAME	INVENTOR		ATTORNEY DOCKET NO.
08/027,140 03/					
08/027,140 03/	03/05/93 LUSE			R	37967B
				KIZOU, H	EXAMINER
		26M1/0227			
JACK SHERMAN				ART UNIT	PAPER NUMBER
LEGAL DEPT.					14
NORAND CORPORATI 550 SECOND ST.,				2400	• •
CEDAR RAPIDS, IA				2603	
				DATE MAILED:	02/27/96
This is a communication from the COMMISSIONER OF PATENTS A	examiner in charg	e of your application.			
COMMISSIONER OF PATERIST	WO INADEMAN	NS .			
			. <b>i</b>		
This application has been exa	mined 🔲 R	lesponsive to communic	; ation filed on		This action is made final
A shortened state as a second state of			/		
A shortened statutory period for re Failure to respond within the period	sponse to this act d for resnonse wil	ion is set to expire	month(s),	days fro	om the date of this letter.
				eu. 35 U.S.C. 133	•
Part I THE FOLLOWING ATTAC	HMENT(S) ARE	PART OF THIS ACTIO	N:		
1. Notice of References C	ited by Examiner	PT(1-892	2   North	o of Deathernants De	
3. Notice of Art Cited by A	policant, PTO-14	49.	A.   Notic	e of Informal Patent	tent Drawing Review, PTO-948. Application, PTO-152.
5. Information on How to I	Effect Drawing Ch	anges, PTO-1474	6. 🗆	o o monital rateri	Application, P10-152.
Part II SUMMARY OF ACTION					<del></del> ,
1. X Claims 8-17					are pending in the application.
· · · · · · · · · · · · · · · · · · ·					
					withdrawn from consideration.
2. Claims					have been cancelled.
3. Ctaims					
4. X Claims & and	4-17				are relacted.
5. 🖾 Claims <u>9 - 13</u>				•	<b>-</b>
5. yes Ciants			<del></del>		_ are objected to.
6. Ciaims	·	<u></u>	and	subject to restrictio	n or election requirement.
7. This application has been t					
			n. 1.65 which are a	cceptable for exami	nation purposes.
8. Formal drawings are requir	ot esnoqeen ni ber	this Office action.			
9. The corrected or substitute	drawings have b	en received on		Under 27 C	F.R. 1.84 these drawings
are acceptable; not	acceptable (see e	xplanation or Notice of C	raftsman's Patent	Drawing Review, P1	r.n. 1.84 inese arawings 'O-948).
_					
<ol> <li>The proposed additional or examiner;  disapproved</li> </ol>	peers eminerus renimexe ent vo	s) or crawings, nied on _ (see explanation).	<del></del>	has (have) been	Dapproved by the
			•		•
11. The proposed drawing corn	action, filed	, has	been Dapprove	d; Didisapproved (	see explanation).
12. Acknowledgement is made	of the claim for pr	fority under 35 U.S.C. 1	19. The certified o	00vhas ∏heen m	neked     not been mentand
Deen filed in parent appl	ication, serial no.	;	filed on		DBARBOBL LEAST YOUR CRIMAG
13. Since this application appperance with the practic	e under Ex parte (	Quayle, 1935 C.D. 11-4	n for formal matter: 53 O.G. 213	s, prosecution as to	the merits is closed in
			o.u. 210.		
14. L. Other	1				



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#### Part III DETAILED ACTION

1. The indicated allowability of claims 8 and 14-17 (original claim numbering) is withdrawn. Upon further review, it was determined that the claims are unpatentable over Tuch et al. (US Patent 5220564) and Tymes (US Patent 5029183). The delay in citation of this art is regretted. Rejection based on these prior art references follows.

### Claim Rejections - 35 USC § 103

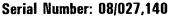
2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

3. Claims 8 and 14-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Tuch et al. in view of Tymes. Referring to Figures 1 and 3, Tuch et al. discloses a wireless local area network comprising a plurality of stations 12-1, ..., 12-N communicating with each other over a radio channel. Any two stations can directly communicate with each other; see col. 2, lines 39-61. The claimed first, second and third data devices read on Stations NO. 1, 2 and 3 of Figure 1. The reference discloses that the stations may be



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mobile stations; see col. 5, lines 48-50; note that mobile devices are inherently battery powered, therefor, the battery power supply limitation is met. The first, second and third radio frequency units read on Receiver 42 and Transmitter 46 (Fig.3) associated with each station. Tuch et al. does not disclose the following: At least one of the stations includes a display and at least one of the stations includes data collecting means, as in claim 8. The stations are carried by an individual user, as in claim 14. The first station has a communication range of approximately ten meters and the second and third stations have a communication range of approximately two meters or less, as in claims 15-17.

Tymes discloses a network system, as shown in Figure 1, comprising remote data gathering units 15, as shown in Figure 4; the remote units are hand-held which implies that they are mobile device carried by an individual user. Each remote unit includes a bar-code reader circuit 43 as well as a keyboard 48 (data collecting means) and a display 49; see col. 4, lines 55-66 and col. 8, lines 26-60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include bar-code reader circuits (data collecting means) and display circuits in the stations of Tuch et al., as taught by Tymes, in order to facilitate data input to the stations and in order to display data transmitted and/or received to the user of the station. It would also have been obvious to one of ordinary skill in the art at the time the invention was made to implement the stations of Tuch et al. as hand-held devices carried by an individual user, as taught by Tymes, in order to allow flexibility in the network topology and enable users to easily move the stations around to places where they are needed, such as the case in the network system of Tymes where users are supposed to move the hand-held devices around to gather data.

Regarding the communication range limitations of two meters and ten meters in claims 15-17; it is submitted that it would have been obvious to one of ordinary skill in the art to set the communication range of the stations in the network of Tuch et al. to two meters, ten meters or any desired value. It should be noted that the communication range of a device is usually determined by the value of the transmission

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power, the higher the transmission power, the longer the communication range; and it would have been obvious to one of ordinary skill in the art to set the communication range of mobile device to a specific short range in order to minimize the transmission power, thus prolonging the life of the batteries, or in order to avoid interference with neighboring networks or neighboring zones of the same network.

## Claim Objections

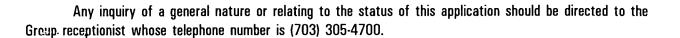
4. Claim 10 (original claim numbering) is objected to because of the following informalities: "said IDLE SENSE messages" (lines 4-5) lack antecedent basis; it appears that the claim was meant to depend from claim 9 instead of claim 8. Appropriate correction is required.

#### Allowable Subject Matter

- 5. Claims 9-13 (original numbering) are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Note that it is assumed that claim 10 depends from claim 9, as indicated above in the objection to the claim. The prior art of record does not teach or suggest a first mobile data device transmitting IDLE SENSE messages, and a second and third mobile data devices initiating a communication sequence upon receiving one of the IDLE SENSE messages, as specified in claim 9.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. Kizou whose telephone number is (703) 305-4744.



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H. Kizou

Primary Examiner G.A.U. 2603

Feb. 20, 1996